

ABSTRACT OF THE DISCLOSURE

A propulsion device operated in a bi-propellant mode uses a safe hydrogen peroxide as oxidizer and yet has high specific impulse and high response performance. A preheated net 18 is provided in a combustion chamber 14. Both of an oxidizer supply means 10 and a fuel supply means 12 open toward the net 18. Oxidizer 30 and fuel 32 are atomized on the net 18 to thereby increase the surface area. At the same time, the oxidizer 30 and fuel 32 are heated on the net 18 and their decomposition is accelerated. By quickly effecting collision and mixing of the oxidizer 30 with the fuel 32, an instantaneous ignitability can be obtained.